

**Commonwealth of Kentucky  
Division for Air Quality**

**PERMIT APPLICATION SUMMARY FORM**

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GENERAL INFORMATION:

Name:	Somerset Recycling Services, Inc.
Address:	1 Recycle Way Somerset, KY 42502
Date application received:	10/31/2007
SIC Code/SIC description:	5093, Scrap and Waste Materials (merchant wholesalers)
Source ID:	21-199-00098
Source A.I. #:	54848
Activity ID:	APE20070002
Permit:	F-07-028 R1

APPLICATION TYPE/PERMIT ACTIVITY:

<input type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input checked="" type="checkbox"/> Permit modification	<input checked="" type="checkbox"/> Conditional major
__Administrative	<input type="checkbox"/> Title V
<u>x</u> Minor	<input type="checkbox"/> Synthetic minor
__Significant	<input checked="" type="checkbox"/> Operating
<input type="checkbox"/> Permit renewal	<input type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input checked="" type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input type="checkbox"/> NESHAPS	<input type="checkbox"/> Other
<input type="checkbox"/> Netted out of PSD/NSR	<input type="checkbox"/> Not major modification per 401 KAR 51:001, 1(116)(b)	

MISCELLANEOUS:

- ☐ Acid rain source
- ☐ Source subject to 112(r)
- ☒ Source applied for federally enforceable emissions cap
- ☐ Source provided terms for alternative operating scenarios
- ☐ Source subject to a MACT standard
- ☐ Source requested case-by-case 112(g) or (j) determination
- ☐ Application proposes new control technology
- ☒ Certified by responsible official
- ☐ Diagrams or drawings included
- ☐ Confidential business information (CBI) submitted in application
- ☐ Pollution Prevention Measures
- ☐ Area is non-attainment (list pollutants):

**EMISSIONS SUMMARY:**

<b>Pollutant</b>	<b>Actual (tpy)</b>	<b>Potential (tpy)</b>
PM/PM <sub>10</sub>	8.24	< 90

**SOURCE DESCRIPTION:**

Somerset Recycling Services, Inc. located in Somerset, KY recycles clean, surplus, and quality rejected products. Their process uses various sizes of grinders to reduce the incoming products to a flake-type material, which is sold to post-secondary plastic manufactures. The first three machines grind hard plastic into chips. Each has its own cyclone (80% efficiency). Grinder #1 has its own in-line baghouse (99.9% efficiency) downstream of the cyclone while units #2 and #3 are connected to a second baghouse downstream (99.9% efficiency) of their respective cyclones. Both baghouse units vent into the building. The combined control efficiency for each unit (1-3) is 99.98%. Machine #4 is a pre-grinder that merely breaks the original-sized hard plastic parts in a manageable size for Units 1-3. Machine #4 (pre-grinder) does not have a control device attached. Grinders #5-10 are used to grind plastic bags into a flake product. All six units (5-10) are identical. Each plastic bag grinder uses water to control dust (75% efficiency) and to aid in the grinding process. In addition to the water suppression, each unit has a cyclone of 80% efficiency. The exhaust from the each cyclone is ducted into its own dedicated final bag collector (50% efficiency) located outside for ease in particulate disposal. The combined control efficiency for each unit (5-10) is 97.5%.

On March 12, 2007 the Division for Air Quality received an application from Somerset Recycling Services, Inc. for an initial conditional major permit under 401 KAR 52:030. The application was completed on April 4, 2007 with the result that the source has maximum allowable emissions of 116 tons per year of particulate matter (PM/PM<sub>10</sub>), based on emission limits from 401 KAR 59:010.

**MINOR REVISION FOR F-07-028 R1**

On October 31, 2007 the Division for Air Quality received an application from Somerset Recycling Services, Inc. for a minor revision under Section 14 of 401 KAR 52:030. The request was to change the name of the existing six plastic bag grinders (EP5 – EP10) to “plastic bag densifiers” and to add two more plastic bag densifiers (EP11 – EP12) that were mistakenly omitted from the previous application for an initial conditional major permit. EP11 and EP12 both have the same throughput rates and control efficiencies as EP5 – EP10. Moreover, EP3 was removed from the facility in 2005 and needs to be eliminated from the permit altogether. The application was completed on December 18, 2007 with the result that the source’s maximum allowable emissions increased approximately 4 tons per year of particulate matter (PM/PM<sub>10</sub>).

**EMISSIONS AND OPERATING CAPS DESCRIPTIONS:**

Somerset Recycling Services, Inc. has applied to operate under federally enforceable permit limits of less than 90 tons per year of PM/PM<sub>10</sub>.

**OPERATIONAL FLEXIBILITY:**

The source is not restricted as to hours of operation or quantity of product produced while remaining within the caps above.